

LXR Antibody

Rabbit Polyclonal Antibody Catalog # ABV10484

Specification

LXR Antibody - Product Information

Application Primary Accession Reactivity Host Clonality

Isotype Calculated MW WB

<u>Q13133</u>

Human, Mouse, Rat

Rabbit Polyclonal Rabbit IgG 50396

LXR Antibody - Additional Information

Gene ID 10062

Application & Usage

Western blotting (0.5-4 μ g/ml). However, the optimal conditions should be determined individually. Other applications have not been determined. The antibody detects 49 kDa LXR alpha and beta subunits of human, mouse, rat and bovine LXR. Cross-reactivity to other species has not been determined. Jurkat cell lysate can be used as positive controls.

Other Names

LXRA, NR1H3, Liver X receptor alpha, LXR a, Oxysterols receptor

Target/Specificity

LXR

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) affinity purified rabbit anti-LXR polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

LXR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LXR Antibody - Protein Information

Name NR1H3

Synonyms LXRA

Function

Nuclear receptor that exhibits a ligand-dependent transcriptional activation activity (PubMed:19481530, PubMed:25661920). Interaction with retinoic acid receptor (RXR) shifts RXR from its role as a silent DNA-binding partner to an active ligand-binding subunit in mediating retinoid responses through target genes defined by LXRES (By similarity). LXRES are DR4-type response elements characterized by direct repeats of two similar hexanuclotide half-sites spaced by four nucleotides (By similarity). Plays an important role in the regulation of cholesterol homeostasis, regulating cholesterol uptake through MYLIP-dependent ubiquitination of LDLR, VLDLR and LRP8 (PubMed:19481530). Interplays functionally with RORA for the regulation of genes involved in liver metabolism (By similarity). Induces LPCAT3- dependent phospholipid remodeling in endoplasmic reticulum (ER) membranes of hepatocytes, driving SREBF1 processing and lipogenesis (By similarity). Via LPCAT3, triggers the incorporation of arachidonate into phosphatidylcholines of ER membranes, increasing membrane dynamics and enabling triacylglycerols transfer to nascent very low-density lipoprotein (VLDL) particles. Via LPCAT3 also counteracts lipid-induced ER stress response and inflammation, likely by modulating SRC kinase membrane compartmentalization and limiting the synthesis of lipid inflammatory mediators (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00407, ECO:0000269|PubMed:25661920}. Cytoplasm {ECO:0000250|UniProtKB:Q9Z0Y9}

Tissue Location

Visceral organs specific expression. Strong expression was found in liver, kidney and intestine followed by spleen and to a lesser extent the adrenals

LXR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LXR Antibody - Images





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LXR Antibody - Background

Liver X receptors (LXRs) are oxysterol activated nuclear receptors which are involved in the regulation of genesis and metabolism of cholesterols and bile acids. LXRs form heterodimeric complexes with the retinoic acid receptors (RARs) once activated by their respective oxysterol ligands. Two known isoforms, alpha and beta, are differentially expressed; the alpha isoform predominantly expressed in liver, whereas beta isoform expression has been shown to be ubiquitous.